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Original

PUS TUBES AND REMARKS ON TREATMENT.

BY ALBERT H. TUTTLE, M. D., CAMBRIDGE, MASS.

After a varied experience in the care of tubal disease, not only where I have had full charge of the case from the beginning symptoms, but also after they have been under the care of other physicians and surgeons for a longer or shorter period before receiving my attention, certain opinions have been formed which I believe have a practical bearing on the successful treatment of these cases.

When the diagnosis of suppuration of the appendages is once made the question of treatment rests between a removal of the diseased organs in toto or drainage of the pus sacs. If the case is one that will admit of the removal of the tubes, i. e. where there is not too great distension of the organ, where the symptoms denote a mild infection or a quiescent stage, when the case is of a chronic type and when the strength of the patient is such that

she can stand the shock of a capital operation and still have a residual power to combat the subsequent changes of mild sepsis; there can be no doubt but this treatment will be most successful.

When, however, a large abscess is present, fluctuating, out behind the uterus and crowding that organ forward and perhaps upward, when the temperature and pulse are running high and rapid emaciation, sweating, pain, anorexia, restlessness, thirst, diarrhoea and the general symptoms of sepsis are well defined, when the strength of the patient has failed and is growing less and less, when the tube cannot be removed without great danger of rupture and the pus contents are highly infectious, when the pelvis floor is closely bound to the tube with inflammatory adhesion, and perhaps already softening the walls of the tube and rectum at their point of contact has

occurred, then it is painfully obvious that we are not confronted with an abdominal section, as such is far too dangerous an operation, yet we cannot let nature take its course, as a rectal fistula and chronic septis is nearly always the result.

Furthermore it may happen that by the time one sees the case there is a chronic or sub-acute condition where the emaciation is great, the patient very weak and the symptoms of poisoning so marked that, together with the absence or repeated disappearance of the tumor, we know that rupture has occurred. As the sac refills there is pain, fever and usually loose, offensive stools. Rupture of the sac into the peritoneal cavity is rare and accidental. Pus accumulations in the body cavity mostly result in a secondary way; that is through the extension of the inflammation by contingency of tissue to ovary, and omentum, secondary abscess with rapid formation of pus in the peritoneal cavity, dissolution of parting walls between the two pus cavities and subsequent invasion into general peritoneal cavity.

Rupture of the sac into the bladder is also rare, because the pus distends the tube greatest at the point of least resistance, the fimbriated extremity, which in the development of the disease extends outward, backward and downward into Douglass' fossa and often below the cervix far away from the bladder. The tube assumes the shape of a curved cow's horn, the point corresponding with the uterine opening and the base with the fimbriated extremity. Rupture occurs at the distended base, which is in contact with cervix, rectum and vagina.

When rupture occurs it is seldom as a tear from over distension, as happens in tubal pregnancy, but by a process of ulceration. The inflammation extends from the peritoneal walls of the tube to the subjacent structures and affects the bowels more particularly as this organ apparently is more susceptible than the uterus or vagina.

The intestinal tissues of both rectum and tube become involved in in-

flammation, soften, break down, form a fistula, with discharge of pus into the rectum. The walls of the fistula harden and the current becomes choked with granulations, causing retention of pus in the old sac, distending it until the pressure and inflammatory consequences are sufficient to again force an opening. The process is often repeated over and over again until, if not relieved, the patient sinks from exhaustion.

When the opening admits free drainage the discharge becomes less offensive in odor and exerts no great deleterious action on the patient, but great changes rapidly result when the matter becomes pent up, decomposition sets in and all the manifestations of poisoning results.

The pus tube differs materially from an abscess; it is a suppurative inflammation of a mucous membrane, and tends to heal slowly, gradually becoming catarrhal, in which form it may persist for months or years. Its cure demands free drainage and perhaps local treatment or removal of the whole organ. Local treatment cannot be applied satisfactorily through the rectum and there is some evidence that absorption of the discharge occurs by the rectal mucous membrane maintaining a condition of septicemia. It is difficult to tell, however, how much of the poisonous symptoms are due to a retention of secretions in the sac from contraction of the recto-tubal opening.

Opening of a tube from the abdomen is unworthy of consideration, as it must involve entirely the peritoneal cavity.

The only place for drawing a tube that offers any satisfaction is the vagina. When there is any considerable quantity of fluid in the tube the distended distal extremity is easily felt behind the cervix, and the thin partition separating the vaginal vault can be readily incised without injury to vessels or neighboring organs. By dilating the small exploratory opening free drainage can be established. The operation can be performed quickly, under cocaine if necessary, and without risk of life

even though the patient be in an extreme condition, a fact which I wish to emphasize.

This is not the end of treatment, but merely the beginning. For a day or so drainage is easy, symptoms abate and there is usually general improvement. Then trouble, which I have somewhat premised, occurs. The position of the uterus is such that it descends in a way to close the opening between vagina and tube. The valve-like action prevents the free flow of pus and makes frequent manipulation of the parts necessary. If the uterus is raised the pus will gush out in the vagina, where it can be easily washed away. I have found it necessary to keep this process up at least twice daily to prevent rise of temperature. Gauze or rubber drains are not very satisfactory. Washing out the cavity is helpful and treatment with a solution of nitrate of silver improves the character of the secretions. Manipulation is generally very powerful, and the patient shrinks from treatment. I have found the sterilized finger, well greased with vaseline, the simplest way of keeping open the passage. The tip of the finger is inserted into the wound and the cervix uteri

raised at the same time. A soft rubber catheter can be passed into the tube for the purpose of medication. By this means it is possible to get a complete cure after weeks or months of treatment. Improvement in the condition of the patient is usually rapid from the beginning of the treatment. As the recovery of the parts is very slow a subsequent removal of the organ will recommend itself in many instances, when the strength of the patient has returned and the secretions have become less virulent.

If the tube has already broken into the rectum it is yet necessary to turn the course of the discharge. The examining finger in the rectum readily determines the fistulous opening by the indurated sensation and central pit. The opening is dilated with the finger, a steel urethral sound passed into the tube for guide, and there the cervix is raised and an incision made through the vagina and carried behind the uterus until the steel sound guide is laid bare. The opening is further increased in size by means of uterine dilators. A rubber drain inserted into the vagina and tube will keep the rectal opening at rest and spontaneous closure will usually result.



RECENT EXPERIENCE IN SURGERY OF THE KIDNEY.

BY H. O. WALKER, M. D., DETROIT, MICH., PRESIDENT OF THE
MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Gentlemen: The paucity of literature upon renal surgery has prompted me to report the following three cases, in which four operations were done representing nearly all the operative procedure that are now done upon the kidney, with the hope that it may be of interest to you.

Case 1.—Sacculated kidney with suppuration and nephro-lithiasis, nephro-lithotomy and subsequent nephrectomy.

August 4, 1896, J. R., aged 29 years, was referred to me by Doctor E. M. Houghton, of Detroit, for operation, with a history as follows: When 6 or 7 years of age he remembers having experienced severe pain in the region of the left kidney, which lasted for a day or so. These attacks of pain came on afterward at intervals of one to three months; at one time it kept away for nearly a year. He did not experience any disturbance of the bladder until he was about 12 or 14 years of age. This combination of pain in the region of the kidney and the bladder continued with increasing severity until three months ago, when it was constant. He has observed a sediment in the urine for nearly 15 years, but at no time did he observe any calcareous deposit. Dr. Houghton, who is an expert microscopist and urinalysist, from frequent examinations of the urine found pus in quantity, blood at times, but no casts, and from the character of the symptoms diagnosed a cystic kidney with renal calculus or calculi. On seeing the patient for the first time he presented a marked emaciation, rapid pulse, 100, temperature 99.6. Percussion revealed well-marked dullness on the left side extending from beneath the

ribs to the brim of the pelvis, well over to the median line. Satisfying myself by two days' observation that Dr. Houghton was correct in the diagnosis, I had, however, a suspicion of trouble in the right kidney. Therefore the character of the operation to be done must be in obedience to that suspicion.

August 6, 1896, after due preparation I performed the operation as follows: By making an incision just below the twelfth rib anteriorly obliquely downward to the crest of ilium (free exposure is necessary in any operation upon it, therefore the necessity of a long incision). After thorough division of structures down to the renal space and pressure by hand of an assistant in front I stripped the fatty capsule off from in front of the kidney with my fingers, giving a large exposure of its surface. Palpitation and inspection revealed a large, irregular fluctuating tumor, through the walls of which could be readily felt the calculi. Before incising the kidney I fastened several catgut sutures in the capsule to the lower opening of the wound to prevent the contents of the kidney escaping into the torn and divided tissues. Through the incision made into the kidney flowed a large quantity of pus and urine, probably two pints. There were several communicating cavities from which I removed these large calculi, which I here exhibit, somewhat imbedded in the walls. I could readily with my fingers feel the urethral orifice, but I was unable to pass anything through it into the bladder. After thorough irrigation and introduction of rubber drainage the wound was closed by interrupted silkworm sutures. The after-treat-

ment consisted in irrigation twice daily. The discharge consisted of pus and urine of considerable quantity. He passed the next day 17 ounces of urine per urethra, aside from that through the drainage tubes. The recovery following the operation was uneventful, and the temperature never rose above 100 and the pulse from 80 to 100, the amount of urine increasing to 28 ounces daily. Although there was undoubtedly a certain amount of urine excreted by the left kidney, as was evidenced from the soaking of the dressings, that little escaped into the bladder was due undoubtedly to "the bending or oblique insertion of a nonstenosed ureter," as described by that eminent surgeon Christian Fenger (*Annals of Surgery*, p. 637, 1895). I was in doubt whether I would adopt this method of treatment done by Fenger. The circumstances of the patient, however, would not permit the long-continued treatment necessary to follow out Fenger's "Conservative Operative Treatment of Sacculated Kidney." I was also doubtful whether there was much of the functioning power of the kidney left. It was therefore decided to do a nephrectomy, August 29, 1896. I first incised by incision and suturing the fistulous opening to prevent the escape of septic material. The incision was in the same line as before, careful dissection liberating the entire kidney, and the vessels and ureter were ligated separately. There was but little hemorrhage. The wound cavity was packed with a long strip of gauze and the edges approximated as in the first operation. An analysis of urine on the day before the operation showed the specific gravity to be 1022, acid pus, and daily quantity 26 to 28 ounces, with the condition of the patient about the same as when I first saw him. On the following day the amount of urine passed was 18 ounces. This gradually increased until now at the present writing, September 12, it varies from 30 to 40 ounces. The wound has nearly healed, appetite good and he walks about the halls of the hospital.

There is still, however, some pus in the urine, but this is gradually disappearing. I here present to you the kidney, together with the calculi removed. The following is the report of the microscopist, together with the two slides: Report of E. H. Troy, M. D. Specimen from the kidney of J. R., operated on by H. O. Walker at St. Mary's Hospital.

No. 1. Stained hidden wood.

No. 2. Stained hidden Haines iron stain.

Microscopical examination shows an abscess wall from which inflammation is infiltrating with surrounding tissues, which is a little peculiar, the width of section, the fitness of kidney remaining as capsule enclosing cavity. The parenchyma or remaining portion of kidney shows chronic change which leaves very little if any of glandular portion of this kidney functional. The glomeruli are either contracted or have disappeared. The microscopical examination does not reveal cause of changes seen, but changes are probably brought about by causes which produce abscess. The steps that were taken in this case have without doubt been justified by the results.

Case No. 2.—Tubercular Kidney, Nephrotomy and Nuclein Treatment. Mrs. P. H., aged 28, came to me August 9, 1896, for my advice as to the advisability of doing an operation for chronic appendicitis, as she had already consulted a surgeon as to the necessity of such an operation and had made arrangements at the hospital for her to have it done the next day. Mrs. H.'s history is as follows: While teaching school four years ago she first noticed pain in her right side below the waist; she shortly afterward developed a leucorrhoea. The pain in the right side gradually increased and was aggravated on lifting or walking. Soon after the appearance of the leucorrhoea a cystitis developed, which has been present ever since. She informed me that urination is very frequent, being every half hour to two hours, and that the urine contains a large amount of deposit. Inspection of the abdomen reveals a

large, indurated, immovable mass, which she says she has noticed for several months gradually increasing in size. It extends from below the ribs to the crest of the ilium on the right side, and is extremely painful on manipulation. She was very much emaciated, with a sallow complexion, and her pulse was 110, and the temperature 102.5. My diagnosis upon examination was disease of the right kidney, probably tubercular, and I advised further observation before deciding as to the character of the operation. She entered Harper Hospital August 10, 1896. Repeated microscopical examinations of urine did not reveal any bacilli tuberculosis, but it contained large quantities of pus and broken-down kidney epithelium. Cystoscopy and catheterization of ureters revealed discharge of pus from both ureters, and although we did not find bacilli tuberculosis I am still of the belief that our patient was suffering from tubercular kidney. As she did not improve I advised a nephrotomy, which was done August 16, 1896, as I did not think a nephrectomy would be practical—first from the fact that both kidneys were affected; second, that in these advanced cases adhesions are so extensive attending the operation that in all probability death would be the result. On dividing the tissues down to the kidney I found it as predicted, firmly bound down by adhesion. When the kidney was incised pus escaped in considerable quantity, together with broken down kidney substance, which microscopically had all the appearance of a tubercular deposit and afterward proved to be so. It is not always possible to determine specifically the true character of secretions and excretions from important organs, even by careful microscopical examinations, yet you are impressed of it clinically. I removed as much of the cheesy material as it was possible to do with the curette. The hemorrhage was considerable, which was controlled by packing the cavity with gauze. From such a history and condition the ultimate result must be necessarily fatal by any operative pro-

cedure that might be instituted. I therefore put our patient upon the nuclein treatment, with which I have had very satisfactory results in surgical tuberculosis, especially of the genito-urinary organs. As little could be expected in so forlorn a case she, however, began to improve in a few days, had a better color, improved appetite and entire subsidence of bladder symptoms, retaining urine nearly all night. She left the hospital September 9 for her home with the wound in the groin still open and still discharging some. The probable outcome of this case is uncertain.

Case 3.—Movable Kidney—Fixation by a Modification of a New Method. Miss A. Z., aged 23, was referred to me at St. Mary's Hospital August 25, 1896, by Dr. A. H. Steinbrecker, of Detroit, for operation. Since leaving her native country, Russia, three years ago, she has been an invalid. Chronic constipation, flatulence, indigestion, supra-orbital neuralgia were the prominent symptoms, together with distress and pain in the right hypochondriac and lumbar region. This latter symptom for the last eleven months has been most distressing when she was in an upright position, compelling her to take to her bed most of the time. By examination a tumor, freely movable, was discovered in the right hypochondriac region, well downward and toward the median line. No difficulty was experienced in displacing it from and replacing it in the normal position of the kidney. On examination the urine was found to be normal. My experience in fixation of movable kidney has been considerable, but not always with the most satisfactory results by the usual methods advocated. The method that I employed in this case, although original personally, I find in looking up the literature that others have resorted to a similar method. After due preparation the operation was made August 26, 1896, the patient being put in the usual condition—semiprone—making the space between the ribs and the ilium prominent by a sand bag. The incision was made in the man-

ner and extent that was done in above case and the kidney well exposed, permitting free inspection and palpitation, drawing it well out through the opening, which was easy from the fact of the existence of a long pedicle. Not discovering anything abnormal, either of the kidney or upper end of ureter, the kidney was then placed in its proper position and the capsule divided for a distance of three inches on its convexity longitudinally, using care not to wound the cortical substance of the kidney. The capsule was then separated from the kidney for a distance from a half to one inch entirely around the cut, and by interrupted catgut sutures fastened the cut edges to the fasciae and muscles so that when the suturing was complete there was a solidity of fixation of the kidney that I had never seen in any other method that I have used. It will be observed that I did not, as others here recommended, introduce a suture through the deep substance of the kidney for the purpose of holding it in position while the suturing of the capsule was being done. This is unnecessary if the kidney has been freely liberated from its bed. The deep suture very easily cuts its way through the substance of the kidney even though mild traction is made by the assistant. This cutting is often followed by almost intractable hemorrhage, and it leaves a damaged kidney. The wound was coated by deep silkworm gut sutures, excepting at its lower end, which was left open and the cavity packed with a long strip of gauze in order to favor slow cicatrization and a firm attachment of the kidney. It is a question, however, whether a complete closure at once would not be just as satisfactory as if the wound was left to heal by slow granulation. The solution will be better ascertained by further experience. This patient August 12 is still in the hospital with the wound nearly healed, and will be kept in bed until after the expiration of four weeks, when she will be permitted to get up, as by that time it is reasonable to suppose that the adhesions will be firm

enough to hold the kidney in place. The frequent occurrence of movable kidney, about one in every five or six women, makes the subject one of importance, and much depends on the surgeon to relieve the distressing symptoms that are liable to occur. Limited displacement is quite as apt to cause distressing symptoms as where the displacement is considerable, for it has frequently been noticed that a kidney with a long pedicle produces symptoms that are but trifling. The simplicity of the method just described commends itself both as to safety and a greater possibility of permanent, satisfactory results. The various methods of transfixion of the kidney with ligature are uncertain as to results, and to a greater or lesser extent dangerous as to its future function. In making a choice for a route to reach the kidney it seems to me there should not be any hesitancy in selecting the anterior in preference to the lumbar route. The only excuse would be the making of a nephrotomy for the purpose of the drainage of an abscess of the kidney. Lumbar nephrotomy is much more difficult and dangerous than by the anterior route. In doing an nephrotomy for relief of a kidney with multiple abscess by the lumbar route it may be found necessary to do a nephrotomy, as it is frequently impossible to empty all the abscess cavities without making a T incision. The danger from hemorrhage is necessarily limited by full exposure of the kidney, and there is less susceptibility to the parts by septic from a suppurating kidney where free dissection is made than by the tearing and pulling by the lumbar route.

In conclusion, therefore, of the foregoing report of cases presented with remarks I am inclined to the following opinions: First, that the most practical route for the kidney for an operation upon it is anteriorally. Second, the selection of the lumbar route is largely supported by precedent and unnecessary timidity on the part of the surgeon. Third, a nephrectomy for tubercular kidney is not

always practicable. Fourth, fixation of a movable kidney by stitching its reflected capsule to the mus-

cles is much to be preferred to that of transfixation and anchorage by strong ligatures.

*CONDITIONS WHICH MAY SIMULATE ORGANIC OBSTRUCTION OF THE LARGE INTESTINE.

BY THOMAS H. MANLY, M. D., NEW YORK.

The large intestine in any part, from the ilio-cecal junction to the fecal outlet is liable to obstruction in varying degrees, in its various segments.

As the anatomical distinction between the large intestine and the small is very wide, and as they are altogether dissimilar in function, it follows necessarily that both the etiology and symptoms of stenosis in either one should bear but little analogy to the other. The small intestine is rich in smooth muscle and adenoid elements, is richly supplied with non-medulated nerves upon the sympathetic system, has a long premesentery, is the centre of active peristaltic movements, and exclusive of the duodenum is quite entirely within the peritoneal cavity. This is the centre of active, vital and chemico-physical changes in digestion.

The large intestine, on the contrary, is little more than a sewer vent to receive, lodge and discharge the residual detritus of digestion. It contains but little muscular fibre in its sacculated cylinder, but is strongly braced by dense bands of fibrous tissue. Its inner coat is made up chiefly of mucous glands, and the lumen of the bowel is of quite constant dimensions. This part of the alimentary canal is more or less fixed, permitting of but a moderate range of motion.

The large intestine is but imperfectly invested by peritoneum, and at the rectum is almost entirely outside this membrane.

The position, shape and arrangement of the colon favor many pathological processes in the human being.

In function this elongated, arched and fixed coil serves a similar purpose to the bladder, as a pouch for excrement vastly more complicated it would seem than its purposes require.

The healthy mucous membrane of the bladder is proof against the absorption of non-corrosive poisons in solution, while the rectal end of the large intestine absorbs almost any substance in a soluble state.

And in cases of impaction, as fecal stasis, we have reasons to believe that the large intestine resorbs many of the most lethal elements of its own contents.

Probably there is no organ of the body more subject to atypical deviations in development and in its relations than the colon. This is particularly manifest to the surgeon in operations on its cecal end, and has been lately dwelt on in an able essay by Dr. Theodore A. McGraw, of Detroit, on "The Surgery of the Large Intestine."

In the human subject the alvine current must ascend against gravity, make various detours as it clears the colic valve, course around three sharp angles and pass the double flexures in the sigmoid before it is

*Abstract of essay read at Surgical Lecture of meeting of Mississippi Valley Medical Association, St. Paul, Minn., September 17, 1896.

discharged into the rectum preliminary to expulsion.

The segments of the colon liable to displacement in hernia are: First, the cecum and appendix; second, the transverse colon in umbilical hernia; third, the sigmoid flexure.

The third is the most rare, although a case of it came under my notice this summer ('96) in a young gentleman brought to me by Dr. J. B. Cowan, of Radford, Va., who had been treated for stricture of the rectum. There was found no rectal stricture, but a partial escape of the sigmoid, which when caught in the inguinal rings would give rise to symptoms of rectal obstruction. I have met with the cecum in operations for strangulation and irreducible inguinal hernia. In large umbilical hernia the transverse colon is frequently engaged.

In my own experience in this type of extrusion, either in inflamed, incarcerated or in strangulated hernia, the symptoms of collapse do not set in as early as when the small intestine is involved.

SEX AND PHYSIOLOGICAL CONDITIONS.

Sex and physiological conditions play an important role in the etiology of pathologic conditions in the rectum end of the large intestine. A careful study of the radical difference of the anatomy and the functions of the organs near the pelvic outlet will readily convince one of this.

The genital organs here come into play as a prominent factor.

In the male of advancing years a hypertrophied prostate may press steadily on the rectal ampulla, provoking an irritation and in aggravated cases acting as a barrier to defecation, thus inducing symptoms of obstruction. It is in the female, however, that the influence of genital ectopia or fecal impaction of the rectum are most pronounced.

Here the pelvic genitalia and the crippled rectum reciprocally act on each other. A retroverted, enlarged uterus may so encroach on the anterior wall of the rectum as to quite close its lumen, excite a pro-

titis and tenesmus, or even give rise to such a condition as to lead the unwary to suspect a neoplasm of the rectum.

This actually occurred in two cases which have come under my notice, in both of which the uterine body, crowding against the rectum, led to the opinion that a tumor had grown in its walls. In both pessaries relieved all the symptoms. At the present time an elderly lady who is under my care with an incoercible procedentia suffers all her distress from rectal symptoms.

And, per contra, how many women there are tentatively treated for various uterine and vesical disorders whose entire troubles depend on either cecal, sigmoid or rectal impactum.

CLINICAL HISTORY.

Intestinal obstruction of various degrees occur at any stage of life, but in the large intestine, if we exclude intersusception, a condition peculiar to early life, we rarely encounter it until after age, not until after the vital forces commence to fail and degenerative changes begin, when the teeth have fallen out and the glands diminish in activity.

Mechanical obstruction in the large bowel depends on influences of two orders, the intrinsic, or organic, and the extrinsic, or indirect, the latter only to be briefly considered here. This may be complete or incomplete. It develops in consequence of (a) first inertia or atony of the intestine with fecal impaction, the commonest; (b), ectopia of adjacent organs, or morbid growths of structure, second in order of frequency; (c) hernia of various types, the rarest, most acute and dangerous.

The immediate dangers to life from impediment in the large intestine, except in hernia, are not great; in the chronic form the constitution is undermined by conditions consecutive to colic stasis.

MORBID ANATOMY.

In the rectum we find the most palpable evidence of pathologic mutations, first, in their degenerative vesicular changes so generally met

here, besides in the child-bearing woman, and second, in the damage to the lavator-ani, a muscle which serves a complex purpose in her sex.

At the anal verge and just above it we may find a dense hypertrophy of submucous tissues, encircling the entire bowel. This may or may not prolapse in defecating, but at all events it often serves as an impediment to evacuation in a complete clearing of the rectum. In a recent case operated on by me it produced so many symptoms of obstruction that a stricture was suspected by the physician who sent the patient to me.

In women after the menopause the pelvic organs undergo atrophic changes, which seem to extend to the rectal structures, but in many late in life hypertrophy of the rectum is very general; nor is it by any means uncommon in elderly men who neglect their regular evacuations or are prone to degenerative lesions of the spinal cord, such especially as involve the trophic or sensory nerves.

Hernial protrusion often comes late in life, or but a small, unnoticed rupture has existed to give trouble later.

A young man came under my care some years ago in a sad state from hernial gangrene. He had a swelling in the right groin for several months before. He did nothing for it until it finally commenced to give him pain. Now he went the rounds of the dispensaries, and it was repeatedly poulticed. After a time it broke through the skin, the displaced cecum had ruptured in a rotten gangrenous state and allowed the feces to escape through the new opening.

An error in diagnosis had been committed and a life lost. As some individuals go for weeks without a full passage from the bowels, they may deceive the physician by not emphasizing this when they come under his care.

Massive tumors, the pregnant uterus or displaced kidney may all interfere with full colic action and lead to symptoms of obstruction.

SYMPTOMATOLOGY AND DIAGNOSIS.

The symptoms which attend rectal or colic obstruction are local and general.

In partial or complete obstruction of the larger intestine the dominant symptoms are local. Our patient is costive, he thinks he has "piles" or vesical disease, from pressure on the bladder, as occurred in one of my own, a gentleman from whom I removed a massive rectal enterolith, as large as a frontal head, which had to be split and removed in sections. It was most remarkable that the patient was entirely unconscious of its presence, though he had severe, troublesome vesical symptoms. For some two years his bowels only moved when his valet gave him emetics.

He assured me that he was confident the petrified mass was lodged there 14 years, and in this view his son, who is a physician, concurred.

In diagnosis the most frequent lesion liable to be confounded with extrinsic obstruction of the large intestine is cancer. This dreadful malady works great havoc here. According to Sutton 98 per cent. of cancers of the bowel occur in the large intestine, 75 per cent. within the rectum, 10 per cent. in the sigmoid, 4 per cent. in the splenic plexura, 3 in the hepatic, 2 in the cecum and 4 non-differentiated.

We endeavor to make diagnosis in this class of cases by surface and rectal exploration.

In those not too fat much valuable information may be elicited by abdominal examination, by percussion and posture of the body. It will answer in most cases of cecal or sigmoid impaction, alone, or conjoined with bimanual manipulation. In acute cases we should always institute a most thorough search for hernia and not be content with inspection, but test all suspected portals of escape by the tactile sense.

Rectal examination is the most positive and valuable in its results as a diagnostic resource.

In all suspected cases this should

be insisted on. One patient may insist that his bowels are "loose" or that he completely evacuates them when neither is the case. Sensation is blunted and he unconsciously deceives himself.

This examination is of most importance in women, on whom it may usually be made most complete. It

entails practically no expense and with few exceptions is quite painless.

The type of alvine obstruction here considered, excluding that induced by hernia, should never of itself seriously threaten life. It only need to be definitely recognized to be safely and permanently relieved.

NOTE.

Owing to a failure to receive Mss. in season, Dr. Manley's article on Vascular Stasis will be continued in next issue.



Editorial

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TREATMENT OF HEMORRHAGE BY ARTIFICIAL SERUM.

Joseph Faneu, of Paris, in *Gazette Hebdomadaire*, August, 1896, gives the following treatment of hemorrhage by artificial serum. In the presence of exhaustive and dangerous hemorrhage there are two things to which we must direct immediate attention: One is to quickly close the open vessels, and the other is, in extreme cases, to replace as far as we can the lost blood; something which will serve in a measure as a substitute for it. Many times we are only enabled to arrest the flow of blood when mortal symptoms threaten. Now the question arises what can we inject at once innocuous as far as the general system is concerned and at the same time will make up in quantity for the extreme loss? Very many fluids have been fabricated and employed for this purpose; some to enjoy a temporary place in therapy and others to survive but a very brief period. But of all materials

used up to this time there has been none which has proven so useful and safe as a simple salt solution—4 grammes of chloride of sodium to 1000 parts of sterilized water, either injected immediately into the vessels or into the subcutaneous tissues. It has now become the au courant method of treatment in collapse after hemorrhage. Very often it acts as promptly when injected into the loose subcutaneous tissues as when thrown directly into a large vessel.

This treatment quite entirely dispenses with the necessity of ever using transfusion or intra-vascular injections of blood from one individual to another. It may be well here to pass in review briefly the liquids which have been employed up to this time (the methods employed), viz., normal blood, blood defibrinated, animal serum and finally physiological solutions. According to Hayem each animal species in the blood pos-

sesses special physico-chemical characters. This author has called attention to the special toxic properties of the blood of an animal of one kind injected into another. The normal blood when injected acts similarly to animal serum. The trouble with the injection of heterogenous blood comes probably from the action of the corpuscles engaging in the capillaries. The globules part with their hemoglobin, their stroma lingers, provokes an alteration in the cells, phlebitis, peritonitis, pleurisy and other inflammations; there seems in the admixture of the two different bloods an antagonism which leads to a destructive reaction. The experiments of Landois have confirmed the investigations of Viscit in this regard. In 1858 Diffenbach recommended defibrinated blood.

But there are dangers in the transfusion of the normal non-coagulated and the defibrinated blood. Under certain circumstances after great hemorrhage pure water has been injected into the circulation, but experience has proven that this is no better than some of the animal fluids employed. It seems to exercise a destructive action on the hematic elements, quickly disintegrating them.

Per contra: histologists and physiologists in searching for something to in a measure supply the loss have found that a simple salt solution will be borne well by the organism without inducing any alteration in the blood or provoking vascular irritation. It has been from this shown that artificial serum suffices to replace the losses due to a considerable hemorrhage with remarkable certainty. It seems to act by giving stability to that physiological law for the preservation of a fixed quantity of liquid in the vessels. It has been demonstrated that in death from hemorrhage the loss of the corpuscular elements of the blood alone is not enough to bring this about; enough of these remain to maintain the vital functions. The immediate cause of death then is not through this loss, but because the medium through which they float,

their carrier, the plasma, has been drained away in mortal quantities.

It now remains to determine by what route we shall force the artificial serum into the system when called on to do so.

Katz, in 1893, first injected saline solution into the cellular tissues in large quantities, after hemorrhage. This is certainly a capital method when any symptoms of approaching death rapidly supercede after a great loss of blood. In this contingency our action must be prompt, for the loss of a few minutes may mean the end of a life.

No doubt the direct intra-vascular injection is the most prompt and decisive in its effects and should be preferred. However, every one has not the requisite anatomical skill, the proper instruments or assistance to realize the greatest results from this measure by the intra-vascular route. It is not without some dangers, too, from sudden, excessive arterial tension, when the fluid is injected too quickly. Experienced operators, however, attach little importance to this accident, though they do to the preliminary requirements.

There is yet one unsettled controversy in the relative value of the best methods in intra-dermic or intra-vascular injection of the artificial serum. It may be said, however, that the intra-vascular is the most prompt and reliable in all forms of extreme urgency, while the hypodermic injections into the cellular tissues will answer in cases of less gravity.

In order to determine the precise action of the artificial serum we resorted to extensive experiments, using dogs for the purpose. Hayem found that when one-seventeenth part in weight of the dog, in blood, was drained off and the animal abandoned to himself, death invariably succeeded. Now, if we immediately transfused either pure, fresh blood or artificial serum the dog quickly revived, and in a little while recovered his strength. Our experiments were conducted in M. Dastre's laboratory. We selected dogs of the same age and weight and repeatedly test-

ed the special value of each method from a therapeutic standpoint the intra-vascular and the intra-cellular.

After repeated and carefully conducted experiments on this phase of the subject, in our judgment one method was equally as valuable as the other. But seeing the difference in the execution and the much greater simplicity of one as compared with the other we most decidedly preferred the intra-cellular injection of the artificial serum under all circumstances.

By this we avoid all chance of injecting air into the veins and a sort of rough and ready method may be resorted to. But when for special reasons we deem it desirable to directly change the general circulation various precautions must be observed. The water should be sterilized, the temperature 40 (C.), and maintained with great care at this point. Our instruments must be scrupulously clean, in order to avoid phletitis or septicemia from minute emboli, wedging into the pulmonary capillaries and inducing impacts.

In the transfusion of blood from one individual to another, along with the difficulties of technique, one may have difficulty in securing one who is ready to take the risk of parting with his blood and the opening into his veins, for it should not be forgotten that many have lost their own lives by this sacrifice in trying to save others.

In obstetrical hemorrhage we will have the most frequent opportunities to employ artificial serum after very exhaustive bleeding.

We lately read of a case which would seem to prove that the intra-dermic plan cannot be relied on in some cases. In this instance resort had to be made to the Braxton Hicks plan of intravascular infection.

We remember one subject, however, in the text that before this was resorted to that 320 grammes had been injected into the cellular tissues.

But we do not wish to be understood as being antagonistic to the intra-vascular method, but believe one should be supplementary to the other.

For ordinary cases of acute exsanguination about two litres of artificial should be injected—nearly a gallon.

Malassez found 7 grammes to 1000 parts of sterilized water, the most useful proportion of sodium chloride. This may be compressed into tablets containing this weight.

But in emergency cases, when we cannot weigh the salt with precision, we may make a safe estimate by another simple means.

A tablespoon contains just seven grammes, or thereabout.

For injection instrument we may use Potain's aspirator or any good, thorough injector. Nearly any region of the body will answer for incision, but the flank, the loin, is to be preferred. We may deposit about 200 cubic centimetres of the liquid at each site. A large area of edema is imperfectly formed, although this generally disappears in half an hour. Moderate massage hastens its disappearance.

In many the severe pain which those large irrigators produce is a pardonable objection against them. As the liquid enters the delicate sentient nerves are rent in one direction, causing the cecal intense distress. But in most cases where much blood is lost the sensibility is deadened and a tendency to mortal coma exists. Here the injection arouses a most salutary reaction.

We have treated 17 cases of a most dangerous form of hemorrhage in Baudelogue's Clinic, with no death.

In all cases requiring these injections all the amplementary measures of hemostasis must be utilized, as raising the limbs, giving stimulants with copious drinks, the inhalation of oxygen, friction, thermal agents, etc.



ELECTROTHERAPY AS A MEANS OF DIAGNOSIS IN GYNECOLOGY.

BY DR. G. APOSTOLI, PARIS.

Read by Dr. Walker.

Dr. Apostoli, after a long and thorough trial of his method, has come to the following general conclusion:

1. The faradic current of tension (generated by the coil of long and fine wire) applied to the uterine cavity, according to the rules established by Dr. Apostoli in 1883, relieves for a longer or shorter time all ovarian pain of nervous or hysterical origin, but remains powerless or nearly so in cases of ovarian pain caused by inflammatory lesion of the peri-uterine tissue or of the appendages.

2. The same faradic current is therefore useful in diagnosis, inasmuch as it helps us to distinguish the nature of so-called ovarian pain and to determine rapidly the differential diagnosis between hysterical and inflammatory ovarian pain. Where the two kinds of pain exist in the same patient we are helped to understand their nature by the fact that the one is relieved and the other is not.

3. If, then, the curative effect of the faradic current clears up or rectifies a doubtful diagnosis, it protects us at the same time from undertaking a useless operation.

On the other hand, if the same faradic current proves ineffective, the lesion being inflammatory, we are led to resort to a supplementary galvanic treatment or to a surgical operation sooner or later.

4. The constant galvanic current applied to the uterine cavity in doses gradually increasing from 50 to 120 milliamperes, according to the rules published by Dr. Apostoli in 1884, and bearing in mind the individual susceptibility and tolerance, will be almost always supported without much pain during the seance, and without febrile reaction afterward if the parts adjacent to the uterus are free from inflammation.

Simple cystic, peri-uterine tumors which are neither inflamed nor suppurating (such as ovarian cysts and hydro-salpinx) may also show perfect tolerance of the galvanic current.

The galvanic current is also sometimes perfectly supported by cases in which the uterus is surrounded by old inflammatory products or exudations no longer pathogenic.

5. There are three classes of cases which could be considered as exceptions to the preceding rule, for they bear the galvanic current more or less badly, though they do not necessarily produce much febrile reaction after the seance.

They are: (A), certain forms of hysteria; (B), fibro-cystic tumors of the uterus; (C), enteritis with false membrane.

It is generally easy to diagnose these cases of intolerance.

6. All acute peri-uterine inflammation (of the pelvic cellular tis-

sues, of the peritoneum and especially of the appendages) will cause the galvanic current to be badly borne when it passes 40 or 50 milliamperes and will cause intolerable pain and febrile action when carried beyond this intensity.

7. The intolerance for the galvanic current is generally proportionate to the extent and gravity of the lesions referred to and increases with the intensity of the current employed—especially when it passes 40 or 50 milliamperes.

8. All inflammation of the appendages which is curable (symptomatically at least) without radical operation, will bear the galvanic current better and better, and there will be a corresponding improvement of the prominent symptoms, such as pain and hemorrhages.

Intolerance noted at the beginning progressively disappears.

9. All grave inflammatory lesions of the appendages, and notably all suppurative processes which are incurable (even symptomatically) by conservative means, show the same intolerance from the beginning to the end of the treatment which was noticed at first, and which is apt to increase instead of diminish if the treatment is continued.

10. Thus the simple study of the tolerance or intolerance of the intra-uterine galvanic treatment, and especially of the post-operative pain and fever occurring on the evening of or the day following the treatment, enables us to make the diagnosis. It also, in four or five seances, given twice weekly, informs us of the condition of the appendages, of their possible inflammation and its degrees, and in this way it lessens the number of laparotomies and exploratory incisions.

11. The same study of the so-called galvanic reactions also informs us rapidly (in 5 to 10 seances) of the curability of these inflammatory lesions which the electric current has demonstrated, and in consequence of this it tells us in one case to abstain from operation while in another it shows an operation to be urgent.

12. En resume, Gynecological Electro-Therapeutics, carefully, me-

thodically and patiently applied, instead of being opposed to the marvelous progress of surgery, comes to its aid.

Independently, in fact, of the great therapeutic service which it renders every day, electricity serves as a touchstone; it assists us in diagnosis and thus directly serves the interests of surgery, in one case showing an operation to be useless and dangerous, in another that its necessity is urgent.

Thus many of the laparotomies, so-called exploratory incisions and mutilations practiced without due deliberation for the relief of rebellious ovarian pain or for lesions of the appendages of uncertain nature, should be, from this time forth, delayed or formally proscribed until all the resources of faradic sedation on the one hand and of the intrauterine galvanic effect on the other have been tried. Experience has abundantly proved these currents to be innocuous, if given with necessary aseptic precautions.

DISCUSSION.

Dr. Gehrung: I would like to make a few remarks on this subject. In regard to ovarian pain there is the inflammatory and the hysterical. The so-called ovarian pain is, most generally, found to be a uterine pain, and not ovarian at all. It is referred to the ovarian region by the patient, and it is usually considered ovarian pain and due to ovarian trouble, but in different tests it can generally be proven to be uterine, and if it is uterine it is quite comprehensible why galvanic applications to the uterine cavity relieve it, which would not relieve real ovarian pain. That it is uterine, primarily, can be told by the patient first referring it most absolutely to the ovarian region; but upon examining the uterus thoroughly, by pressure and intra-uterine examination, you can, in a certain position, produce that exact ovarian pain that the patient has been complaining of. Now if the pain is produced there, and it is found that the palpation of the ovaries does not produce the pain, then it shows very conclusively that the

pain is uterine pain, referred to the ovarian region through the peculiar nerve connections in these tissues, and not ovarian. So a diagnosis can apparently be made without the use of the galvanic current.

Dr. Bishop: I wanted to speak about what the author of the paper says of the effect of the galvanic current upon the generative organs in females, the subjects of epilepsy, particularly of hystero-epilepsy. What I am going to say about hystero-epilepsy, perhaps, has been known for a long time to all of us—why the galvanic current has been so unfavorable in these cases. I have never seen cases of hystero-epilepsy that would bear the galvanic current.

I believe many cases of hysteria, in which there is a neurotic condition of the ovaries and the uterus, can be diagnosed by the application of the galvanic current to the ovaries and the uterus. I had a case recently in my office. She was a young lady who complained of pain in the groins and general neurasthenia. Upon close examination of her pelvic organs I could find no visible indications of disease. The os was perfectly healthy and the uterus felt healthy. There was no discharge from the mouth. The sound passed into the uterus caused pain. That was the only sign of disease there was about the uterus. There was a little tenderness about the ovaries. Yet the woman complained of pain in her pelvis. I turned on the weak galvanic current, and the current did not flow three minutes before she said it made her feel bad. I did not persist in its further use. When she made me the next visit I gave her a dose of the weak current from the faradic coil high tension. She said that she felt a great deal better. When she came back the third week she said she hoped I would never again apply the electricity I applied at first to the os. So I think it is possible to diagnose in these cases of hysteria pains about the ovaries.

Dr. A. Lapthorn Smith: I might add my testimony by just mentioning one or two cases. One case was that of a lady who suffered from

dysmenorrhea very severely, and I did not realize how much she suffered till I saw her in an attack, while the period was going on. It was something pitiful to see the agony she was in. The perspiration stood in beads on her forehead. I tried the galvanic current for that. It was one of the few cases in which it failed. It did no good. Did rapid dilatation of the uterus. She was a little better every second period for a few periods—every alternating period was as bad as ever. I then tried fine wire faradism, but with no benefit. After trying all I could in this way for one year I felt justified in operating, although I could not feel anything the matter with the appendages. I could feel them, but not very much the matter with them. She was very emaciated from having suffered so long, and from having taken so much morphine. In operating I found one tube sealed up and the ovaries sclerosed. This explained why every second period she suffered so much agony; at least this was the suggestion that occurred to my mind. Every second period she ovulated this side, which was blocked up, and it was during the spasmodic efforts of the tube to catch the egg and carry it to the uterus, and which was impossible for it to do, was what brought on these terrible spasms of pain. I removed both appendages in her case, for I was afraid if I only removed one something would go wrong with the other one. She made a rapid recovery in ten days, in spite of all my efforts to keep her in bed. In a month she was walking around outside the same as before. She gained strength rapidly and has remained well ever since. This shows where electricity failed there was some organic lesion.

The other case was a more remarkable one. She was under the care of a very able man in Vermont. She then came to Montreal and was under the care of a doctor who was a firm believer in electricity. She had profuse menstruation and suffered a great deal with it, and besides a tumor could be felt in her abdomen, a round pear-shaped symmetrical tumor, rising to the umbilicus. You

could feel it distinctly by bi-manual palpation, but we could not feel the appendages. I suppose they were very small. I could not feel them behind the uterus. However, after the doctor in Vermont had treated her with electricity two or three times she found she was worse after each treatment. She had to go to bed after each application. He was very much discouraged, having heard that electricity was good for fibroids. The doctor in Montreal was very much disappointed also. He spoke to me. I said I thought there must be something wrong with the appendages, although I could not feel anything of them. Did a laparotomy. When I put my hand in I could feel this large tumor quite distinctly, and in feeling around to catch it I found the appendages down behind, and dissecting down I found a large pus tube. Went to work again and got another one out. I got out two pus ovaries, leaving a little uterus about normal in size. The ovaries did not break as I was taking them out. The feeling of them was as like that of a fibroid as anything I ever felt. I have seen about sixty fibroids. It felt like any one of them—a symmetrical, tense tumor. This patient made a good recovery. She is earning her own living now in Vermont, and comes to see me every few months, when she visits her friends in Montreal, to tell me what a pleas-

ure it is to live now, to be free from this pain she used to suffer from. This case bears out Apostoli's contention that where the galvanic current is badly borne there is some trouble in the appendages, and we are justified in operating if we do not cure the patients by electricity.

Dr. Walker: Was she a married lady?

Dr. Smith: She was single. I am not sure how she got these pus tubes. We must not say every case of pus tubes is due to gonorrhea. I have met two or three cases in ladies whose characters were beyond suspicion. I have had a case of gonorrhea in a child three or four years of age from using the towel her mother and father used; the father had gonorrhea and had given it to the mother and the mother did not know that she had it. The father came and told me that he had gonorrhea. I attributed the gonorrhea in the little child to the use of the towel. They were living in a boarding house and had the one towel for the use of the three of them. Now that little girl may have pus tubes when she is 18 years of age. She has gonorrhea in the uterus and the vagina, and it may be in her tubes, and that infection may keep up for years. This lady I speak of, I do not know how she got it. Certainly the tubes were full of pus, three or four ounces in each.

ELECTRIFICATION IN INFANCY

September 11, 1896. H. B., age 7 weeks, was brought to the clinic of the Brooklyn Post Graduate School of Electro-Therapeutics by his mother with a history of diarrhea, and the usual troubles of bottle-fed babies in their first hot summer. Weighed 9 pounds at birth, but now wasted, irritable and, from lack of sleep and nourishment, rapidly causing his mother to despair. Had received good medical and hygienic treatment without turning the condition into a better one.

September 11. Seated both mother and child on the static platform and gave positive electrification for 10

minutes; child cried most of the time. September 14, reported improvement in sleep; was quieter; bowels were getting regular; repeated treatment. September 16 reports, improving rapidly, with no other treatment than electrification; cries very little; sleeps finely three hours at a time; takes nourishment and sleeps again. Has lost all previous irritability; repeated positive electrification. September 18, repeated treatment. Child has never cried during seance since first visit. Is evidently thriving on his food; bowels regular and gives no further cause for worry. September 23, reported same and did not bring again for treatment.

Current Medical Literature.

GASTROPTOSIS AND CHLOROSIS.

Leo comments on Meinert's contention that chlorosis is produced by the gastroptosis brought about by the pressure of the corset. In cases of considerable gastroptosis where the upper curvature of the stomach lies below the liver and the abdominal walls are lax it may be easy to define the limits of the stomach previously distended; but in young subjects, such as chlorotic girls, the abdominal walls are not lax. In his investigations, carried out upon a large number of chlorotics who wore corsets, the author has never been able to map out the lesser curvature of the stomach. It is usual, however, in such cases to find the greater curvature extending lower down than usual. This may be due to an abnormal distensibility of the stomach, and this view is borne out by the displacement of the lateral limits of the organ. This condition is the result of chlorosis, but is also seen in other young anemic individuals who have never worn the corset, as is shown by the author's investigations into another series of cases. The author thinks from other considerations, however, that gastroptosis is not infrequent in corset-wearing chlorotics. Koester has repeatedly found such gastroptosis in the bodies of young women who have worn corsets. Leo does not regard the gastroptosis as the cause of chlorosis, for chlorosis is not infrequent in those who have never worn corsets, and only a few among corset-wearing individuals develop chlorosis. Although Meinert's views of the causal relation

between chlorosis and corset wearing cannot be accepted, yet his work is very important as further pointing out the ill effects produced by the corset.

—British Medical Journal.

SUBJECTIVE CACOSMIA.

At the sixty-seventh reunion of German Naturalists and Physicians, Dr. Zarniko, of Hamburg, drew attention to an essential difference between subjective odors on the one side and subjective sounds and sights on the other hand. The first are nearly always of disagreeable nature (excrements, cadaver, etc.), while the second are of a more pleasing character (singing of birds, roseate clouds, colored stars, etc.) The speaker believes that this distinction depends upon the fact that so-called subjective sensations are in reality objective in the great majority of cases, and are largely due to latent empyema of the communicating cavities. He had been led to this conviction by the study of four cases in which there was no indication of disease of an accessory cavity and which the diagnoses of hysteria and hypochondria were at first made. Finally, however, puncture of the maxillary sinus brought to light, in four cases, an accumulation of fetid pus. The essayist likewise recommended, in all cases of cacoscopia without other apparent cause, that the maxillary sinuses should be irrigated by way of the inferior meatus (after the method of Schmidt.) Many subjective disorders of smell will thus be shown to be of objective origin.

—Revue hebdomadaire de Laryngologie,
etc

SYPHILIS OF THE EXTERNAL EAR.

Secondary syphilitic lesions of the external ear, particularly of the auditory canal, are rare, and for that reason Dr. A. Bruck publishes a case observed in the clinic of Dr. Baginsky, especially as, with disease of both auditory canals, there was associated a syphilitic neoplasm of the external ear upon one side. The patient was a man, 27 years of age, who came to the clinic on January 31, 1895, complaining of hardness of hearing, with otorrhea. Infection had occurred in September, 1894. There had been an exanthem, sore throat, mucus patches and fissures of the lips. Before Christmas itching and prickling sensations had manifested themselves in the ears, with loud subjective sounds, and there was likewise a bad-smelling, watery discharge. Upon examination both canals were perceived to be filled with flat, wartlike, reddish-gray growths, resembling condylomata of the anus. The surface, partly ulcerated and covered by a fatty layer, secreted an offensive serous fluid. The excrescences spread to the interior of the canal, which they so obstructed as to render impossible the inspection of its deeper parts and the tympanum. Upon the left ear, at the anterior insertion of the anti-helix was a small warty formation, of a yellowish-gray color and the size of a small nut—a papillary syphilide, according to Lesur, and absolutely pathognomonic of the disease. There was engorgement of the infra-maxillary and cervical glands, with mucus patches of the velum palati and tonsils. The constitutional treatment was by mercurial ointment and local by chromic acid. The cure was complete.

—Revue hebdomadaire de Laryngologie, etc.

IGNORANCE AND QUACKERY.

Some little time ago Koch placed himself under the care of Father Kneipp, of cold-water fame. We are told there is honor among thieves, and suppose there is a sort

of free-masonry between charlatans which induced Koch to ask medical assistance of the pastor.

The latter's treatment consists of "cold-water baths, bandages, and walks upon wet grass with bare feet" prescribed indiscriminately for every ill to which human flesh is subject.

We wonder how long an American patient would survive this sort of thing? It is a pregnant commentary upon the German's deplorable ignorance of drugs.

—Medical Brief.

CLINICAL SIGNIFICANCE OF THE HAND.

Tubercular dactylitis may at first sight closely simulate rheumatoid disease in children; but the spindle swelling is caused by bone expansion, and is accompanied by suppuration, in both of which points it differs essentially from the latter disease. The other group, the rare diseases, are as follows:

Paget's Disease (osteitis deformans).—The cranium and long bones are the parts usually affected; and, though the hands sometimes show changes, these are hardly diagnostic, and are very rare.

Acromegaly (of Marie).—The large size of the hands is due to the excessive development of all the tissues; there is no appreciable increase of length, only of width and thickness, earning for the hands the epithets "battledore" and "spade-like." The wrists are about normal; the nails are somewhat flattened, small and longitudinally striated.

Hypertrophic Pulmonary Osteo-Arthropathy.—The carpo-metacarpus, the hand proper, is about normal in size; but the fingers are enormously enlarged, the bulbous terminal phalanges being especially prominent; the nails are curved and striated, reminding one of the beak of a parrot; there is great enlargement of the wrists.

Myxedematous hands may at first sight be mistaken for either acromegaly or hypertrophic pulmonary osteo-arthropathy; but it will be seen

that the skin of the other parts of the body is involved, and that it is adherent to the deeper structures.

Vaso-Motor Paralysis of the Extremities.—A few rare cases have been set down to this cause, and may somewhat resemble the foregoing; the presence of subcutaneous hemorrhages may clear up the diagnosis.

The hands may exhibit marked changes in rickets, which in rare cases may simulate some of the former diseases; but an examination of the rest of the body will generally readily afford the data for a diagnosis.

In leontiasis ossea (Virchow) the

hands may be affected; but for diagnostic purposes the changes are unimportant.

Nodosities of the fingers have been noted in connection with dilatation of the stomach.

I do not pretend to have exhaustively treated even one aspect of this subject, and have left untouched the clubbed fingers of emphysema, abnormal and extra digitation, Depuytren's contraction, Raynaud's disease in connection with rheumatism, and all the thousand and one things that crowd to one's mind when it is allowed to rest on the subject.

—Dr. A. S. Wohlman, in Bristol Medical-Chirurgical Journal.

 COCAINE 		 MURIATE 
C.P. ANHYDROUS CRYSTALS.		BOEHRINGER-B.&S.
STANDARD OF PURITY		DISPENSED BY
THE WORLD OVER.		ALL DRUGGISTS

Translations from Foreign Exchanges.

By F. E. CHANDLER, M. D.

VARIA.

BLUSHING.

There are three degrees of blushing. A. the simple blushing of normal individuals. B. Emotional blushing, temporary or permanent. C. Importunate blushing or erythrophobia.

The last class seems peculiar to young men, to people of emotional ancestry, to the neurasthenic and rarely to the hysterical.

Erythrophobia is usually very tenacious, and results from psychic treatment can be obtained only when it is concomitant with hysteria.

—Independance Medicale.

FOREIGN BODY IN THE RECTUM.—Professor Simon, of Nancy, France, reports the case of a patient who entered the hospital in a bad condition. He presented as a chief symptom an acute pain on the level of the rectum and a serous and fetid discharge from the anus. A cancer of the rectum was first thought of.

Rectal touch disclosed the presence of a hard and friable body, that was removed. It proved to be a mass of frogs' bones, 45 grains in weight, that had been swallowed by the patient. Rapid cure followed.

—Independance Medicale.

THE INFLUENCE OF MENSTRUATION ON THE EXCRETION OF URIC ACID.—M. Ed. Laval says that on the second day of the menstrual period, when the flow is most abundant, there is a sudden drop in the quantity of uric acid present in the urine. The next day the amount is slightly increased,

and on the fourth day the excretion of uric acid exceeds the normal.

This result is comparable with that obtained in true hemorrhages.

—Independance Medicale.

NEUROPATHIC WARTS.—Dr. Spiegelberg, of Munich, reports the case of a female child, aged three and one-half weeks, who had the whole ear covered with proliferations that were partly flat and partly papillomatous, commencing in the scaphoid fossa. The entire concha and the borders of the tragus and anti-tragus were filled from analogous proliferations. From the lobe to the jugular fossa extends a light red band.

The warts were excised and the author submitted them to an anatomical and microscopic examination. He could find no traces of nervous elements. In general the epithelium was hyperplastic, its thickness increased and the malpighian layer proliferated. The connective tissue was also hypertrophied between the papillary body and the clorion.

—Munchener Medic. Wochenschrift.

A CASE OF ABSENCE OF THE SPLEEN.—Dr. Olacocha, of San Bartoleme, Peru, has seen a soldier who was received into the hospital after being ill for twelve days.

All the symptoms pointed to a typho-malarial fever. The patient died two days after his admission.

The autopsy showed complete absence of the spleen. In the place where it should normally have been was a certain quantity of adipose connective tissue.

The ganglions of the mesentery

and of the inguinal and cervical regions were considerably hypertrophied, which indicated that they had, by their activity, compensated for the absence of the spleen.

—Cronica Medica de Lima.

PRECOCIOUS MENSTRUATION.—Dr. C. Montaris, of Mytilene, Greece, says that he had recently the chance of examining a little girl born August 21, 1892, and who menstruated for the first time on February 16, 1893. Her breasts developed shortly after this. Hair abundant; stature above the average. From a morphological and plastic point of view she is rather agreeably formed. Her features are regular and imbued with an amount of seriousness that is uncommon in children of this age.

—Iatriki Proodos.

TYPHOID FEVER AND LETTUCE.—Water is the chief means of propagating typhoid fever. The apparent exceptions to the rule diminish daily. It often happened that milk diluted with typhogenic water or kept in vessels rinsed in the same is the vehicle of typhoid fever.

Vegetables, greens, fruits, etc., which come from the country may propagate fever, especially when to keep them looking fresh they have been sprinkled with impure water. Which one of us does not know people who filter and boil carefully their drinking water, but who allow their food to be washed with well water that is too often contaminated by a neighboring outhouse?

—Le Nord Medical.

THE HUNT IN BOHEMIA.—An Austrian journal gives the following interesting statistics of the results of hunting on Sunday in Bohemia during 1895:

The "Sonntagsjaeger," or those amateurs who can get away from their occupations on Sunday only for a quiet hunt, were spread over 12,384 villages, and have averaged 1000 shots each.

During the year they have killed

27 men, 13 old women, 7 boys and 3 little girls; 2104 men, mostly game drivers, have been wounded.

In addition to this, these same "Sonntagsjaeger" have killed three oxen, 12 cows, 132 calves, 276 goats, 57 rams, 72 sheep, 3671 hunting dogs, 11,491 other dogs, 8762 cats, 18 deer, 455 does, 149 hare, 322 partridges, 26 pheasants, 844 sparrows and 2 horses.

They have paid in indemnities 459,596 florins, in tips to the wounded 633,093 florins; to the physicians and lawyers 172,000 florins.

They have been in jail 74,388 hours for infraction of the game laws.

—Le Nord Medical.

We see in the Hospitalstidende that Professor Hofmeister, formerly of the German University of Prague, has been appointed to the position of professor of physiological chemistry in the University of Strasburg, a post that became vacant on the death of Professor Hoppe-Seyler.

ARISTOL.—Walton praises aristol in every form of burn. It is especially to be recommended on account of its absence of odor and its power of causing a rapid formation of granulations. In small burns aristol should be used in the form of a powder; in more extensive ones the following salve is recommended:

R.—Aristol	5.0
Olive oil	10.0
Vaseline	40.0

—Med. Novitaten.

APOLYSIN.—According to Dr. Greif, of Serkowitz, a number of cases of neuralgia that had resisted every other form of treatment yielded to apolysin. Large doses were given, 3 to 6 grammes daily, and were well borne. Dr. Greif heartily recommends the drug.

—Deutsche Medicin. Wochenschrift.

VESICAL CALCULUS AND VESICO-VAGINAL FISTULA.—A rare case of this is reported by Dr. Fink, of Halberstadt. The anamnese showed that in her fifteenth year the patient had had an abortion

when about six months pregnant, and the trunk only of the fetus came away, the head remaining in utero. An examination showed that among many others there was one especially large stone impacted in a vesico-vaginal fistula. This stone was 4 cm. long, 2 cm. wide and 1.2 cm. thick. Its nucleus was found to be formed of one-half of a fetal lower jawbone and a bit of the occipital bone.

—Med. Novitaten.

DEPILATORY. — Dr. Butte recommends the following form of iod-collodion as a depilatory: Tr. Iod. 3, 0; turpentine 6, 0; castor oil 8, 0; alcohol 40, 0; collodion 100, 0. The parts should be painted over thickly with this for three or four days consecutively.

Upon removal of the collodion layer all the hairs are adherent to the inner side.

—Aerztl. Rundschau.

INCUBATION OF BERIBERI. — Dr. Roll reports two endemics of this disease on shipboard which could be traced directly to the drinking water used.

In both cases the crew remained perfectly well as long as the European water held out, although they were stationed where there were many cases of beriberi. When this water gave out they were obliged to fill the casks with water from wells in the affected towns and in four or five weeks' time the disease broke out.

This shows the time of incubation to be about one month.

—Norsk Mag. f. Laegevidenskaben.

ACUTE YELLOW ATROPHY OF THE LIVER. — Dr. Lanz found a rare case of this disease in the Children's Hospital of Escherich. The disease attacked a 4-year-old boy, who had suffered for months from want of appetite and increasing weakness and thirst.

Brought into the clinic on account of an icterus that had developed

suddenly, he showed symptoms of acute yellow atrophy on the third day. The same day, exitus lethalis. The post-mortem confirmed the diagnosis. According to Dr. Lanz there are only 15 other published cases of this disease.

—Wiener Klin. Wochenschr.

SALVIA OFFICINALIS. — Krahn, who has made extensive experiments with this plant, recommends it highly in hyperidrosis. In 38 cases where it was used good results were obtained in 36, and 18 were cured. The tincture was the preparation of the drug most used. The dose was 20 drops in the morning and 20 to 40 drops at night; or, where the attacks are divided equally between night and day, 20 drops every eight hours.

—Med. Novitaten.

SYCOSIS. — V. Tile praises the following treatment: Neither epilation nor shaving the head is done. The hair is clipped closely every few days. The separate pustules are lanced, emptied and washed with a 1 per cent. alcoholic sublimate solution.

The cuts are made three or four times daily at first; less often later on. This treatment is continued for about six weeks until every trace of the disease has disappeared. At night the affected parts are covered with either zinc or Hebra's ointment. Rosenthal's paste may be used occasionally.

—Vratch.

ULCUS MOLLE. — Neisser's treatment of the *ulcus molle* with pure carbolic acid applied thoroughly to the bottom of the ulcer by means of a bit of cotton wrapped on a match is recommended by Dr. Joseph, of Berlin, who has employed it in many cases.

He gives as his experience with it that it is absolutely painless and often prevents relapse. After cauterization the ulcer is sprinkled with iodoform, euphen or thioform.

Neisser then dwells upon the relation between the *ulcus molle* and forms of tertiary syphilis. It is not uncommon to have typical *ulcera mollia* apparently develop into serpiginous syphilides that heal on one side while they spread on the other.

In these cases the *ulcera mollia* were merely points of departure for a tertiary syphilitic relapse that healed rapidly upon administration of potassium iodide.

—Deutsch Med. Wochenschr.

MIGRATORY FOREIGN BODIES OF THE EYE AND THEIR EXTRACTION.—Dr. L. de Wecker says that a foreign body will be tolerated while it is held in the enveloping membranes of the depth of the eye or in the lower portion of the vitreous, but as soon as, by migration, aided by the lymphatic current and by the movement that its envelop of leucocytes imparts to it, the foreign body has penetrated across the iris into the anterior chamber, where it obstructs a portion of the angle of the iris and zone of ocular filtration, it provokes symptoms of irritation that are more or less serious.

Is this migration common to all the substances that wound the eye or is it peculiar to those that are more or less free and have a volume and weight that is comparatively elevated? This is a question to be resolved clinically and experimentally. What we must know in practice, given the undeniable fact of the migration of foreign bodies in the eye, are the following considerations: (A), The phenomena of irritation are caused by the presence of the foreign body in the anterior chamber; (B), such foreign bodies should not be removed by a cut made near the point of immigration, that is to say, toward the periphery of the cornea, but always on the opposite side, in the cornea itself.

—Le Progres Medical.

SUPERNUMERARY BREASTS.

—Goldberger reports a case of polymastia in which the supernumerary mammary glands, two in number, were situated, one in the right axilla and the other about three inches below the left axilla. At the time of their greatest development they were each as large as a goose's egg or an ordinary apple. Neither one of them was provided with a nipple. Liquid taken by means of a hypodermic syringe from the right supernumerary breast was ascertained, by means of a microscopical examination, to be milk. The author states that among the many cases of polymastia previously reported there have only been four in which the supernumerary glands have been destitute of ducts opening on the surface.

—Medical Recorder.

MILK DIET IN BRIGHT'S DISEASE.

—Ajello (Gior. dell. Assoc. Napol. di Med. e Naturalist., 1896) has studied the effect of milk diet and of mixed diet in 21 cases of chronic Bright's disease, and he concludes strongly in favor of a mixed diet; at any rate, as far as the chronic stages of Bright's disease are concerned. Of the 21 cases, milk diet increased the volume of urine in nine and diminished it in 11, and had no effect in one. The albumen diminished in only five cases and increased considerably in 16 under milk, whilst under the same diet the urea diminished in 18 cases, the phosphoric anhydride diminished in 13, the same for the sulphur in 13 cases, and conversely under a mixed diet these elements showed an increase. Full tables are given of each case. In the acute stages the author would advise milk diet, but he is convinced that for the chronic stages of the disease a mixed diet is far better.

Current Surgical Literature.

T. H. MANLEY, M. D., New York, Editor.

REDRESSMENT FORCES AND TARSO CLASTIC IN THE TREATMENT OF CLUB FOOT IN THE INFANT.

BY DR. A. BOQUEL.

Manipulation aided by tenotomy often fails in the treatment of club foot. Most surgeons endeavor by ample force to overcome the resistance of the soft parts and the ligaments.

Delive published his procedure of treatment of this deformity in 1860, by what he termed "massage force." This was supplemented in some instances by tarsoclasty with use of instruments. Later came the osseous operations and Phelps' method of reposition by the open division of all the contracted parts. This latter did not meet with special favor among continental surgeons. Jones, of Liverpool, and Wolff, of Berlin, condemned it at the Berlin Congress in 1890, and since that time most surgeons have recommended manual reposition rather than the perin-cision.

Delore's method consists essentially in seizing the foot, and by a moderate but steady force pressing it into position. The patient is placed in the arms of a nurse or on a table, then with one hand firmly holding the ankle joint, the other manipulates the foot. Care must be exercised not to produce an epiphyseal separation of the heads of the tibia or fistula in these cases. Movement of moderate flexion is now begun and continued until the contracted state of the tendon of Achilles is thoroughly overcome. Now the calcaneum is seized and the foot rotated outward or inward, as the case may require, until all resistance is overcome and natural form is restored. Care must be observed not

to unduly stretch the integument. The limb is placed in a plaster dressing, well padded.

This method is excellent, but requires for its success patience and caution. It consumes sometimes half an hour in its application. It requires relays of assistants, and, as Delores observes, the practical difficulty in the way is the danger of prolonged anesthesia. In most cases, as a preliminary step, the tendo-Achilles is divided. Many varieties of tarsoclast have recently been devised to substitute the hand, but none of them are satisfactory in all cases.

There is great danger of crushing the bones or inflicting damage to the soft parts when the osteoclast is employed. It is therefore safer, if necessary, to make repeated efforts than to apply great mechanical force at once.

Wolff's method of redressment forcees has won many partisans in Germany and America. It is recommended equally in inveterate cases of childhood, as well as adults. The technique of this method is as follows: On a thick bandage extending from the meta-tarsophalangeal articulations to the tuberosity of the tibia a double silicate band is applied. On this, provisionally, is placed a plaster bandage. Now an assistant fixes the knee, when the foot is gradually pressed in a position of valgus. Moderate force is kept up until the plaster is well set. By the fourth day the silicate is well hardened, when the plaster intercovering is cut off. If the first redressment has not been complete a wedge-shaped segment of the inverting mould is removed and fresh dressings applied over the first. The patient is placed on the feet at the earliest possible date. Successful, however, as this method is, in many

cases it is not without serious drawbacks, and cannot be safely adopted except by the experienced.

In the treatment of this class of cases the choice of election lies between redressment force on the one hand and redressment massage on the other.

In many the former answers admirably, as it has the advantage of brevity in convalescence and less tedium in treatment, but the danger to the integument and shock to the system, with occasional failure, outweigh many of its advantages.

The latter requires most persevering efforts in skilled and experienced hands and a very considerable period in treatment.

Gaz. Heb. Juilliet 19, '96.

CHANGE OF THE POSITION OF THE SPLEEN IN THE CADAVER.

Bearing on the above subject MM. Ramon and Ricon find in their experience:

First. That when one restores to the lungs their reserve air the spleen becomes horizontal, its anterior being considerably raised, while its posterior is lowered.

Second. When we insufflate the stomach, the colon being empty, the spleen takes a vertical position.

Third. But when we distend colon alone, the stomach being empty, the spleen again becomes nearly horizontal.

Fifth. And lastly, when all the organs are empty and the lungs contain their reserve of air, the spleen inclines to the second and third positions, lying nearly parallel to the ribs, though not so obliquely.

—Soc. Di. Biology, Gaz. Heb., 16 Juilliet, '96.

SURGICAL USE OF COCAINE.

1. The use of cocaine should not be abandoned because its irrational employment has produced deleterious results.

2. Always make a thorough physical examination of the patient before injecting the drug.

3. It should not be used in cases showing organic diseases of the brain, heart, lungs or kidneys, or in persons of neurotic diathesis.

4. Children bear it fully as well as adults.

5. The patient should always be placed in a recumbent position prior to its employment.

6. Constriction should be used whenever possible to limit the action of the drug to the desired area.

7. Use a freshly-prepared solution for each case.

8. Distilled water should always be employed, to which phenic, salicylic or boric acid should be added.

9. A two per cent. solution has a better effect and is safer than solutions of greater strength.

10. Never inject a larger quantity than one and one-eighth grains when no restriction is used.

11. About the head, face and neck one-third of a grain should never be exceeded.

12. When restriction is possible the dose may be as large as two grains.

13. Every slight physiological effect is not necessarily to be taken as cause for alarm.

14. Cocaine does have effect upon inflamed tissues.

15. In case alarming symptoms occur, use amyl nitrite, strychnine, digitalis, ether or ammonia.

—Codex Medicus.

THE DIFFERENT VARIETIES OF GALL-STONES.

Hanot and Letienne publish an interesting note based on their extensive researches on biliary calculus.

They divide calculi into those of microbic and non-microbic origin. The fresh microbic calculi they describe as of irregular form, vaguely round, raspberry-like, and apparently constituted of numerous small elementary concretions, many of which are to be seen free in the bile. These stones are not faceted, and resemble, as far as form is concerned, dried breadcrumbs. Their crystalline arrangement is not regular, and they

are not laminated. They are relatively soft in consistency, and crumble when pressure is applied, and may or may not have a central nucleus. Their color is generally pale. The old concretions of microbic origin correspond to the ordinary description of biliary calculi, occurring either as the solitary, ovoid, laminated stone, or the multiple faceted stones, also having a laminated structure and usually a central nucleus.

The calculi not demonstrated as of microbic origin were only observed in cases where there was complete obstruction of the main ducts due to

pressure from without, and not to stone.

These calculi are remarkable for their irregularity of form; they are amorphous and show numerous indentations on their surface, containing yellow bile-pigment, and contrasting strongly with the almost black color of the stone itself; they are very hard, and not faceted. The authors state that the organism almost invariably connected with the stones of microbic origin, and found also in the bile in these cases, was the *bacillus coli communis*.

—Comptes Rendus de la Societe de Biologie.



Current Literature in Obstetrics and Gynecology.

E. D. KINNEY, M. D., Boston, Editor.

ABSTRACT OF PAPER ON ONE HUNDRED AND TEN OPERATIONS FOR RETRODISPLACEMENT OF THE UTERUS, WITH SUBSEQUENT RESULTS.

Read before the Canada Medical Association on August 26, 1893, at Montreal, by A. Laphorn Smith, B. A., M. D., M. R. C. S., England; Fellow of the American Gynecological Society; Gynecologist to the Samaritan and Western Hospitals, and to the Montreal Dispensary; Professor of Clinical Gynecology in Bishop's College.

Dr. Laphorn Smith, of Montreal, read a report of one hundred and ten operations for retrodisplacement of the uterus, of which forty-two were Alexander's operations of shortening the round ligaments, and sixty-eight ventrofixations or suspensio-uteri operations. He said that he now felt justified in coming to certain conclusions concerning these two operations since he had been performing them for over six years, the first Alexander's having been performed on the 23d of January, 1892, and the first ventrofixation on the 18th of March, 1890.

Most of the patients had been seen and examined, not only by himself, but also by many other physicians and students attending his clinics, while the few who had not been seen had been heard from through the physicians who had sent them to him. The results of both operations had on the whole been very satisfactory, with the exception of two cases, in which the ligaments broke, being very fatty, and also partly owing to the method of operating, which he has since improved; in one of these cases he immediately performed ventrofixation with good results; the other was a complete failure, having declined further operation. Also in one of the Alexander

cases the uterus remained in good position for six months, when it began to fall a little. The failures all occurred among his earlier cases, none having occurred among those operated upon during the last two years. So far no case of hernia had resulted from the operation. The ventrofixations gave even better results than the Alexander's. They were performed for the most part upon women who not only had retroversion with fixation, but the ovaries and tubes were at the same time prolapsed and bound down by more or less dense adhesions. In many of these also there was laceration of the cervix and perineum with cystocele and rectocele. In those cases in which he had performed seven operations at one sitting occupying from an hour and ten minutes to an hour and a half, he had obtained the most gratifying results. These operations were: First, rapid dilatation with Goodell's dilator; second, curetting with Martin's curette; third, repair of lacerated cervix by Emmett's method, or amputation by Schroeder's method; fourth, tightening up the relaxed anterior vaginal wall by Stoltz's method; fifth, repair of the perineum by Hegar's method; sixth, removal of diseased tubes and ovaries, and breaking up all adhesions binding uterus down; and seventh, scarifying the anterior surface of the uterus and posterior surface of the abdominal wall, and stitching the uterus to the latter by two fine buried silk sutures, most carefully sterilized. The disasters following ventrofixation were two hernias and one relapse, all of which were subsequently remedied by a second operation. At the present time Alexander's operation has no death rate, while ventrofixation, while it has not any death rate

in simple non-adherent cases of retroversion, yet it must have a small death rate, at least when it follows the removal of very bad pus tubes.

He had performed both Alexander's operation and ventrofixation for prolapse as well as for retroversion, and as the results were excellent provided the pelvic floor was at the same time repaired, he much preferred these operations to vaginal hysterectomy for prolapse, an operation which he had performed a few times, and found easy, but which he hardly felt justified in doing.

Although several of the Alexander's had subsequently become pregnant, in no case did any untoward accident happen. But he had heard that some one on whom he had performed ventrofixation had subsequently become pregnant and aborted, but he had so far been unable to verify it. He was not aware that any of them had even become pregnant. This was probably owing to the fact that he had in most of them removed the tubes and ovaries, while in those in which he had left one or both ovaries and tubes, they were diseased and unable to functionate. He was frequently asked which of the two operations he preferred. This was difficult to answer. Alexander's was safe, but he preferred ventrofixation, because it had given him the best results. He would probably continue to do Alexander's operation in young married or marriageable women in whom the ovaries and tubes were perfectly free from organic disease; while he would reserve ventrofixation for women who were sterile or who had marked adhesions, and who had suffered so much and so long in spite of treatment that the appendages had to be removed.

PENETRATING WOUND OF THE ABDOMEN IN A GRAVID WOMAN.

Dr. Micheli reports the case of a woman, aged 19, who received two stabs in the hypogastric region when six months pregnant. Both wounds penetrated the abdominal cavity,

the one about 2 cm. to the right of the linea alba, and about 5 cm. from the pubes; the other somewhat higher up on the left side. Laparotomy was performed immediately. It was then found that, instead of two external wounds, there were four wounds of the uterus, two on the right and two on the left side. The first two only affected the serous membrane. The lower one of the two on the left side penetrated into the uterine cavity and pierced the canon. The uterine wounds were united with Lembert sutures. The patient went on well up to the third day, when severe pains set in, and on the fourth day she aborted of a six months' fetus. A fortnight later she had a slight pleural effusion, from which she soon recovered, and she is now, two months after the operation, in perfect health. The fetus was dead, and presented a wound 13 mm. long, penetrating into the left pleural cavity; the small intestine wounded in two places, and fibrino-purulent peritonitis.

SUBCUTANEOUS EMPHYSEMA OCCURRING DURING LABOR.

Dr. G. L. Freeman recently met with the following case, about 6 A. M. on December 1, 1895: I was called to a primipara in the first stage of labor. She had been ill since 11 P. M. the previous night, and was nervous and excitable till the second stage began at 8 A. M. Labor terminated naturally about 11 A. M. During the second stage the pains were very severe, and she became much heavier, holding in her breath and bearing down. About an hour before delivery she said her face felt tight and swollen; on inspection it was seen to be full, but no further notice was taken, and she turned away her head, covered it with a pillow, and remained so till the child was born. Then, when she turned around her face was seen to be enormously distended, as well as her throat, shoulders and chest down to about the third ribs, and the swelling had the typical

crackling feeling of subcutaneous emphysema. She complained of breathlessness and a feeling of constriction about her throat. In her efforts to expel the placenta the swelling obviously increased, and in the breathlessness became aggravated. Firm downward pressure on the neck relieved her temporarily, and after the removal of the placenta the difficulty gradually subsided. Toward night the swelling was considerably diminished, and on the morning of the 4th there was no trace of the condition. She was a slight, spare, healthy woman, 20 years of age, with a good previous history.

TREATMENT OF UTERINE CARCINOMA.

Dr. Baecker, in the discussion on the treatment of uterine carcinoma, at the Budapest Medical Society, pointed out that among 11,095 female patients who had been under his care 705 suffered from this disease, these cases being 6.35 per cent. of the total. There is no causal relation between it and delivery, for in 85 per cent. of the cases three years intervened between delivery and the outbreak of the disease. Moreover, a carcinomatous uterus shows symptoms of endometritis and the disease is developed in those situations where endometritis commonly occurs. He therefore agreed with the opinion of those writers who hold that endometritis predisposes to uterine carcinoma, and advocate a radical treatment of the former condition. Extirpation is to be resorted to as soon as the diagnosis is clear. Supra-vaginal amputation, which has been proposed for carcinoma of the vaginal portion, is unsatisfactory, because the end of the stump becomes strictured, and there may also remain some carcinomatous particles after the operation. Extirpation by the sacral method is to be performed only in those cases where the cervix is already so much thinned that it breaks down in the course of vaginal extirpation. Vaginal extirpation has

been performed in 70 cases, with a death rate of 11.6 per cent., and in 33 per cent. there was no relapse during three years. Professor Tauffner said that the relation between endometritis and uterine carcinoma had by no means been proved; he recommended Pean-Segond's method.

Professor Elischer believed that his histological investigations showed endometritis to be a secondary process. He removed tumors the size of a child's head per vaginam, but only in the case of a freely-movable uterus. In three cases of radical operation he had obtained gratifying results, one patient having already passed 12 years without a relapse.

METRORRHAGIA IN OLD WOMEN.

The following contribution is valuable and timely in pointing to the many types of uterine hemorrhage, which are not of a malignant origin, in middle-aged and elderly women. At this stage of life in the uterus there is a reversion of the anatomical elements, and the fungoid vegetation, which often stuff the uterine cavity on microscopical examination, will be found to present many of the features of sarcomatous, or lymphoid tissue, and lead the unwary into suspecting the existence of such a condition as would warrant a hysterectomy, while under intelligently directed simple treatment cure speedily follows. In 1896 Dr. Monod called attention to a type of uterine hemorrhage in old women. He cited several cases, among which was one 12 years past the menopause. Two were over 60 years old. They had been seized with the copious and prolonged uterine bleeding. The general condition of these women was excellent; no appreciable local lesion was present, neither epithelioma of the neck nor cancer of body, or other intra-uterine growth. Monod subjected these women to the use of ergot, with local injections of hot water. This cured them all. Uterine hemorrhage is symptomatic, gener-

ally of malignant growth, edematous and fibroids; although sometimes it is impossible to assign a cause.

Bowlet and Trusseau have made a special study of the latter. Free bleeding in chronic endometritis is common in young women. The womb is enlarged, fixed and painful, and gives issue to a sanguine-purulent discharge. Martin, of Berlin, has observed abundant exterior hemorrhage in tuberculous women, without any appreciable lesion of the uterus. He had seen the same in cases of interstitial nephritis and diseases of the heart. Dancel had noted it in the polysarcic. It has been particularly noticed in very corpulent women. Herman and Tourneux have studied the morbid anatomy of this lesion condition. They noted characteristic changes in the

uterine tissue. The muscle elements became soft and pliable; the vessels in the mucosum are dilated and brittle; the arteries became rigid and atheromatous. Delbet noted the constant disappearance of the glands in the mucosum and subjacent tissues, they being substituted by a fibrous or fatty tissue. This alteration predisposes in some aged women to excessive uterine hemorrhage.

Treatment—In most of these cases rest in bed, dilatation of the cervix, curettage and warm boric acid irrigation suffices. But in obstinate cases potent astringents are useful. Electricity often serves a most useful part in stimulating the lax muscle and imparting tenacity to the vascular elements.

—Gazette de Gynecology.





Therapeutical Progress.

SILVER AND SILVER SALTS AS ANTISEPTICS; THEIR BACTERIOLOGICAL RELATIONS AND APPLICATION IN SURGERY.

BY B. CREDE.

Years ago the observations of my father in treating the inflammation of the eyelids of young infants with a solution of nitrate of silver induced me subsequently to inquire into the therapeutic application and usefulness of silver and its salts. I did, however, not meet with success in my attempts to attain to a generally applicable method of treating wounds with nitrate of silver, on account of its ready chemical decomposition and its corrosive action on mucous membranes.

I was subsequently incited to further efforts by the experimental labors of Behring, Miller, Bolton and others on the antiseptic value of silver solutions, and further by the investigations of Liebrecht, Meyer, Jadasson and Schaeffer on the value of argentic albuminoids, especially of Argonine. But all these labors failed to add much practical value to surgery. I did not get on the right track before I happened to come to the Johns Hopkins Hospital, in Baltimore, while traveling in the United States, and there witnessed the method of dressing employed by Dr. Halsted. He was fully familiar with the observations of German investigators in regard to the antiseptic action of the noble metals and made practical use of it by covering small or closed wounds with thin silver foil and controlling the destructive action of this dressing upon bacteria. But, as far as my knowledge goes, neither Dr. Halsted nor any other practitioner inquired into the real cause of the antibacterial efficiency of this dressing. Therefore no gen-

eral systematic method for the treatment of all kinds of wounds was provided.

In common with my assistant, Dr. Beier, I have succeeded in proving that metallic silver, when placed upon aseptic sterile wounds, remains unchanged and does not at all irritate, so that it may be considered in every respect a thorough aseptic dressing material. In case a wound is not aseptic but is in any part or in its surrounding infected by bacteria, the products of the bacterial vitality oxidize the surface of the silver and enter into combination with the argentic oxide, forming argentic albuminates which have strong antiseptic properties. In other words, a powerful antiseptic is at once formed by the aid of the aseptic metallic silver dressing as soon as the wound is already infected or becomes so. We succeeded in determining by a series of experimental researches that the bacterial secretions acting upon silver and entering into combination with its oxides are organic acids, pre-eminently lactic acid, and that the antiseptic which an infected wound when dressed with metallic silver generates of itself is lactate of silver. After having established this fact the Chemische Fabrik von Heyden, at Radebeul-Dresden, succeeded in kindly furnishing me with an absolutely pure, stable lactate of silver, to which was given the briefer and characteristic name Actol. I could now continue my experiments, commenced with metallic silver, with the real argentic disinfectant, and that both in its dry powder form and in its aqueous solution.

Lactate of silver (Actol) is a white, odorless, almost tasteless powder, which, when kept in a brown glass vial, remains unchanged; it is soluble in the proportion of 1 to 15 parts

in water and in albuminous fluids. It has no corrosive or irritating action upon wounds, but sometimes produces in sensitive ones a more or less strong burning sensation varying in duration from several minutes to several hours. In its aqueous solution in the proportion of 1 to 1000 parts, it destroys within 5 minutes streptococci, staphylococci, bacillum anthracis, etc. In blood serum it retards the development of bacterial germs in a dilution of 1:80000 parts, while corrosive sublimate does so only in a solution of 1:20000 parts. It is, therefore, evident that the silver salts, as already noticed by Koch and Behring, with nitrate of silver, exercise in animal cellular tissue a destructive action upon bacterial life, and therefore have an antiseptic power at least four times as great as that of corrosive sublimate. This is, moreover, far more poisonous and forms in a concentrated solution insoluble compounds with albuminous substances, whereby it destroys the cellular tissue and checks a further penetrating antiseptic action. Herein lies a very considerable difference in action and efficiency between some organic silver salts on the one hand and corrosive sublimate, as well as almost all other efficient antiseptic dressings, on the other hand. The silver salts here taken into consideration do not destroy cellular tissue, while they prevent the propagation of bacteria, since they remain in solution and because this solution permeates the tissues and consequently not only exercises a local action, but also transfers it from layer to layer. The property of lactate of silver of retaining its solubility as well as that of the albuminates formed, while permeating the cellular tissues, until all the silver is transformed into albuminate, admits theoretically the advantage of applying it also internally by means of hypodermic injection in some infectious diseases, the more so as it is absolutely non-poisonous. The results of my experiments with this method of application may be found recorded in my pamphlet mentioned before. I, therefore, confine my statements in this regard to mentioning

but two hopeless cases of anthrax and five grave cases of erysipelas, all of which were successfully treated by subcutaneous injection with a solution of actol (0.05 : 20.0 aqua with anthrax, and 0.3—1.0 : 100—200 aqua with erysipelas). Encouraged by such success I shall continue this experimental treatment in cases of septicemia, pyemia, puerperal fever and diphtheria. A local affection could not occur because I injected the solution into the subcutaneous cellular tissue of the abdomen. Since this application is somewhat painful it may be applied either during narcosis or in combination with cocaine.

In veterinary practice a solution five times as strong may be used.

As stated before, when lactate of silver is employed in powder form it exercises some irritating action upon more sensitive tissues, because it is rapidly absorbed on account of its ready solubility; a toxic effect, therefore, is not quite excluded after a liberal and long-continued application of the dry powder. Besides this, the treatment becomes unnecessarily expensive. For this reason the Chemische Fabrik von Heyden in Radebeul-Dresden prepared eight more organic silver salts and placed them at my disposal for further experimentation. It was to be assumed that these salts, on account of their close chemical relation to lactate of silver, would have similar antiseptic properties while they had the advantage of being less readily soluble. Of these argentic salts citrate of silver proved to be the preferable and most efficient one in its action in bacteriological and clinical experimental researches. It forms a light, dusty and stable powder without odor and almost devoid of taste and of the same antiseptic power as the lactate, but it requires 3800 parts of water for solution. A solution of 1 part in 4000 parts of water suffices to destroy all bacteria within 10 minutes; its antiseptic power, therefore, is amply sufficient in all cases commonly occurring. It occasions no unpleasant or painful sensation in any kind of wound and its scanty solubility secures for it a more lasting action with the advantage of a sparing

application. Its use is, therefore, much cheaper than that of iodoform, although it is relatively about twice as dear.

It is now more than seven months that I have also used citrate of silver, known by the briefer term "Itrol." I have treated with it more than 400 surgical cases and more than 1000 patients in clinical and in private practice. In all this experience I have never observed any abnormal or detrimental reaction with the citrate of silver (Itrol) treatment, but uniformly a normal and rapid process of healing, never before experienced with the former method of asepsis and antiseptis.

I now come to my usual method of treating wounds. I need not state that I also consider the aseptic method of treating wounds the ideal one, but it must be admitted that side by side with the aseptic method the antiseptic one cannot be dispensed with. In many cases quite an extended disinfection of the infected wound is requisite and there occur not a few cases which do not admit aseptic treatment, as is also the case with wounds on some parts of the body. Nor should it be left out of consideration that a perfect aseptic treatment can only be resorted to in well appointed hospitals and cannot be attained at in private practice, and still less in the surgery on the battlefield. Since the aseptic treatment, however, has full value only when it can be applied to its full extent, the additional antiseptic treatment is indispensable in many cases. I have also frequently observed in parallel cases that in feeble persons, as in other cases, the process of healing was considerably facilitated and a much more rapid one besides, is more expensive than my with my antiseptic method than with the common aseptic dressing which, silver dressing on account of the relatively much larger amount of material used. Nor do I see any reason why we should not employ an efficient antiseptic in the treatment of wounds, which is not at all irritating, nor poisonous, and which acts with superior promptitude. The fact that chemical disinfectants are more

and more going out of use may be explained by the fact that no universally applicable antiseptic is yet known. I feel justified in maintaining that there is no antiseptic which is entirely devoid of any irritating action, is non-poisonous and does not affect cellular tissue unfavorably, which never fails to destroy germs, which is odorless and can be used as a powder, in which condition only it can be employed on many wounds and can exercise a lasting action. All known antiseptics comply only with one or some of these requisite conditions, while the practitioner anxiously looks for an antiseptic which fulfills as much as possible all requirements. I dare not maintain that citrate of silver (Itrol) represents such an ideal antiseptic, but the fact is that we have as yet no better and no more perfect one at our command.

Nor is there any considerable difference between my method of treatment of wounds and the commonly practiced aseptic treatment. It stands about half way between the aseptic and antiseptic processes. After the operation has been performed I also rinse the wound and its surroundings repeatedly and carefully with water. When closing the wound, I first cover it with silver gauze or with gray silver dressing, as its manufacturer, Mr. Arnold, in Chemnitz, calls it, in order to distinguish it from white silver dressing employed in minor wounds and in transplantations. This silver gauze is a mull impregnated with metallic silver in a most minute powder form. In this condition and so applied, metallic silver has proved to be perfectly non-irritating and is undoubtedly a superior aseptic dressing. Its antiseptic action is initiated after the bacterial infection of the wound and the development of bacterial vitality and its secretions, largely consisting of lactic and some other organic acids. These at once act upon the silver resulting, as stated before, in the formation of lactate of silver, of itself a powerful antiseptic.

Infection may occasionally occur even in wounds presumed to be aseptic; in such cases the presence of metallic silver in a minute division of-

fers a constant and prompt counter-effect against any secondary infection. Wounds which I prefer not to close at once are first dusted with citrate of silver and subsequently covered with silver gauze, especially in the deeper parts; upon the surface the cheaper common gauze is mostly a sufficient protection. Wounds already disinfected, as well as serious complicated fractures, are not re-disinfected by me because I deem it not necessary; I confine my treatment to a thorough cleansing with soap and water and a subsequent liberal sprinkling with dry citrate of silver without disturbing the process of healing by a close examination; on the top of citrate of silver I fill the wound with silver gauze and above that with common sterile gauze. In case infection already has set in and deeply penetrated the tissue this cannot well be counteracted, but to a certain extent a disinfection can be accomplished by means of citrate of silver, as it remains dissolved in the serum and in this way may penetrate the cellular tissues and reach the spot of bacterial infection.

By reason of theoretical argumentation and some practical experience, it seems to me, however, not impossible to obtain in such cases a still further reaching disinfection by the application of the more soluble lactate of silver, as I have observed in cases of anthrax and erysipelas.

When rinsing cavities like the bladder, etc., I have successfully applied citrate of silver in a solution of 1 part in 4000 to 10,000 parts of water, and in cases of abscesses with much pus and where more energetic action is required, the use of the more soluble lactate of silver (Actol) in solution of 1 part in 500 to 2000 parts of water is preferable.

It is, however, a special gratification to me, apart from injections in cases of tuberculosis, no longer to be obliged to employ iodoform, which is in many cases an unreliable and insufficient antiseptic.

Whenever instruments have to be placed into parts of the body or into cavities or wounds for some time, of course only such made of pure silver are employed. It is well known

that seams with silver wire are and remain less irritating than those made with silk, but as silver wire cannot be applied in every case, I use silk, catgut and caoutchouc ligatures and drainings coated with metallic silver. This has been more elaborately described in my treatise repeatedly mentioned. The threads are hereby not only protected against infection, remaining sterile, but in case of any incipient infection of the canule or the surrounding tissue the silver will enter, as described, into a chemical combination which by its intrinsic antibacterial action at once will counteract and destroy such primary or secondary infection, as long as the silver lasts.

In regard to the efficient application of citrate of silver in gynecological practice, in the treatment of diseases of the eye, the ear, the throat, as well as of the sexual organs, I must refer to the detailed statements in my treatise.

In concluding I beg to call your attention to the various chemical, surgical and bacteriological preparations placed before you for inspection. They are:

1. White silver dressing.
2. Gray silver dressing.
3. Silks, catgut and drains coated with silver.
4. Petri's disks containing:
 - a. Silver upon agar-agar infected in sterile strata with staphylococci.
 - b. Gold, silver and copper upon an equally infected medium of agar-agar. Gold has remained intact, silver is partly, copper entirely dissolved.
 - c. Disk with agar-agar also infected with staphylococci upon which has been placed a trace of lactate of silver forming a large sterile strata.
 - d. Disk equally prepared and charged with a trace of citrate of silver, also forming large sterile strata.
 - e. Gauze, threads and drains upon infected agar-agar, also forming sterile strata.
5. Two drawings of silver with sterile surroundings infected with streptococci.
6. Citrate of silver and lactate of silver in dry substance.

FERRATIN.

"Eisen-Hunger." — Physiological and clinical tests prove that ferratin supplies the needed iron to nourish the blood—and hence the system.

On page 341, of Professor Schmiedeberg's "Arzneimittellehre" (latest edition) this eminent pharmacologist states: "The fact and effect of a craving for iron (Eisen-Hunger) can be experimentally proved on animals. A strong, frisky dog, after a moderate loss of blood, was fed for five months on pure milk only, and gradually became so weak that he refused further nourishment, became reduced in body weight, tottered when on his legs, and finally was at the point of death. At this stage one gramme of ferratin was added to the milk per day; the dog ate this with ravenous appetite, and within 14 days had regained his weight and general condition to nearly equal the normal strength and activity possessed before commencement of the experiment."

Ferratin in 8-grain doses three times daily was recommended by Germain See, the late distinguished French therapist, for "those suffering from anemia from hard work, though apparently in good health; those, of both sexes, affected with chlorosis; those weakened by too rapid growth and puberty; those fatigued by study; and, in short, all in whom a diminution of red blood corpuscles had ensued, due no matter to what causes."

HEART STRAIN.

Pawinski regards caffeine as of especial use in functional and degen-

erative disease of the heart-muscle, and especially in the early stages. Sudden heart-strain from emotion or during fevers is particularly benefited by caffeine.—Medical Times and Hospital Gazette.

PILOCARPINE.

Pilocarpine, as it occurs commercially, often contains jaborin and other allied alkaloids and impurities; jaborin acts like atropin, hindering secretion, and its presence therefore disturbs the therapeutic effect of pilocarpine. The most reliable test for purity is the melting point. The United States Pharmacopoeia gives 197 degrees C. (386.0 degrees F.) as melting point; comparative tests recently made in the experimental laboratory of C. F. Boehringer & Soehne showed that Boehringer's Pilocarpine muriate melts at 15 degrees C. above any of the other brands in the market. The best of the competing products were recrystallized, and the resulting crystals then closely approximated the "Boehringer" standard, proving that impurities originally present had been eliminated by the careful recrystallization.

As Pilocarpine hydrochlorate is now more popular than ever before in medical practice, and in view of the delicate uses to which it is put—internal or local, with possibility of toxic effects—physicians and pharmacists should exercise special care to prescribe and dispense only an absolutely pure product. And the melting point test seems to be the easiest applied and most reliable. The product should not melt below 197 degrees C.



For Physicians' Wives

LOST APPETITE.

A child's appetite is a great test of the state of his health. As long as he takes his meals regularly, eats eagerly and takes a fair quantity of nourishment, there is little or nothing the matter, and other symptoms of ill-health are of comparatively small importance. A healthy appetite leads a child to show signs of enjoyment of the food set before him. It is encouraged by the muscular and mental exercise, by contentment, by regularity in the times of meals, by the use of plain food only, and by varying the food in a greater or less degree, according to the age of the child. Food eaten with a relish is much better digested, and it is a great mistake to insist upon children eating when they show a marked disinclination for food.

Hunger and appetite must not be regarded as exactly the same thing. Hunger is a craving of every tissue of the body for some material which will nourish it, and it is expressed by a curious sinking sensation in the stomach, and a longing for food. Appetite is less physical than mental, and watches over the functions of the stomach, observes all that is presented for entrance, and rejects what is injurious or distasteful. An unspoiled appetite is a perfect guide as to the quality and quantity of food to be taken, but it may easily be destroyed by over-indulgence or bad habits, such as giving too much or too little food, administering it too frequently, giving foods that are too rich, too stimulating, or unsuit-

able to the age of the child, and by irregularity in the meal times.

Inordinate hunger is often found when food has been given that is not well adapted to the young digestion, as in this case the child, although a quantity of food has been taken, cannot assimilate it, and is really being starved. In older children and adults, inordinate hunger sometimes arises from gastric irritation, and will often lead to more food being taken than is necessary, a condition of affairs which will further increase the trouble.

Loss of appetite is found in children of feverish condition, as a precursor of fevers and other ill-health, and in acute disorders of the stomach. If a child takes his food badly something is sure to be wrong, and it is necessary to ascertain the cause. If it is an infant that is teething, ascertain whether the gums need lancing. If not, before doing anything further, give a dose of fluid magnesia. Sometimes lack of fresh air is the cause of loss of appetite, and the child could be carried out into the air for lengthened periods. The bottle should be given at longer intervals, and it may be desirable to change the food given, as sometimes one food palls upon a child that will immediately take another.

In hot climates, in summer, loss of appetite often means the approach or presence of a fever, and then to insist upon food would be a great mistake. A drink of pure, fresh water should be given occasionally, and a little magnesia will do no harm. If there is constipation a

dose of compound rhubarb powder and gray powder will often put matters quite to rights, the dose being proportioned to the age of the child.

Plenty of air and exercise and the judicious administration of aperients, if necessary, are most valuable in all cases of loss of appetite occurring without other signs of disease, but, of course, if any disease is apparent, this must be treated on its own merits.

AROUND THE HOUSE.

A pad and pencil in the kitchen is a great help to the cook's memory.

* * *

Never leave vegetables, fruit or cooked meats in a tin vessel over night, or any length of time, as there are poisonous substances in the tin which are highly dangerous and often poison whole families.

* * *

Sprinkle unslacked lime around the dark corners of your cellar to absorb the dampness and kill disease germs. It isn't a bad idea to keep a box of lime setting in the cellar or in any damp closet or room.

* * *

Don't let rolls of goods, scraps and shoes lie around on closet floors; make wall pockets of brown denim—the cheap quality—or old gunny sacking, and tack on the walls, in which store away your odds and ends. It will be much neater, handier and more economical.

* * *

A cozy corner can be easily devised from a couch, a few cushions and several yards of Chinese crepe.

* * *

Pretty stands for hot dishes are made of wrought iron. The design may be oblong or circular, as desired.

* * *

A cheaper and purer sirup than you can possibly buy is made of a pint of granulated sugar and just enough water to keep it from burning while the sugar melts. Boil three minutes and do not stir.

An excellent palliative for large burns is found in dipping old linen or fine cotton cloths in milk and binding loosely on the burn. Then put over that a thick layer of corn-starch, which dampen with milk, poured on as fast as it dries. No scar will be left, and the burn will heal rapidly.—Chicago Record.

It is told of some English women missionaries that the King of Uganda, where they were sent, was so struck by their fashionable attire that he observed that they probably put all their food in their sleeves, as there was plenty of room for it there, and none in their waists. This recalls the story of Captain Griffith of the female prisoner who scraped the walls of her cell to make powder for her aged cheeks.

SUGAR NOT INJURIOUS TO THE TEETH.

A writer in the Contemporary Review devotes most of an article on champagne to the popular idea that gout is produced by the sugar contained in that drink. The paper is "not a medical paper," but the writer brings forward considerable evidence to show that champagne has nothing to do with the production of gout, and in an aside speaks of that other popular notion that sugar destroys the teeth. He says:

"In corroboration of the fallacy of the sugar and gout idea it may be mentioned that the still more reprehensible dogma in a sanitary point of view that sugar ruins children's teeth is equally false. Indeed, how the idea ever came into existence is a mystery, seeing that the finest, whitest and strongest teeth are found in the mouths of negroes brought up on sugar plantations, who from their earliest years upward consume more sugar than any other class of people whatever. Those at all skeptical of the value of this fact have only to look around among their personal friends and see whether the sugar-eaters or the sugar-shunners have the finest teeth, and they will find other things be-

ing equal—that the sugar-eaters, as a rule, have the best teeth. The only possible way for accounting for this libel against sugar seems to be by supposing it originated in the brain of one of our economically-disposed great-grandmothers, at the time when sugar was two shillings a pound, in order to prevent her children gratifying their cravings for sweets at the expense of the contents of the sugar basin.”

In making Indian meal mush, cook it with milk in place of water, or part water and part milk, if not convenient to use all milk. The pudding will be much richer, and when fried will more readily take a nice brown.

Every housewife should impress upon the minds of her family that the best sauce for any meat is cheerfulness. Laughter aids digestion, and people should never grumble while eating.

HOT WEATHER NOTES FROM STILLVILLE.

Atlanta Constitution.

We rise with the thermometer now—not with the lark.

The sun has barbecued the cattle on a thousand hills.

This is the time when you can't possibly appreciate the melting notes of the mockingbirds.

The Mayor's celluloid cuffs caught fire yesterday and burned down the town hall.

Even the Democratic party in this neighborhood is in a blaze of glory.

Several candidates got overheated yesterday while running for office.

We don't go to church these hot days. We simply look at the thermometer and fall to praying.

Boston Transcript—Dr. Jalap—“Let me see your tongue, please.”

Patient—“Oh! doctor! no tongue can tell how bad I feel.”

A MINOR POINT IN NURSING.

Editor Medical World:—Pin the four corners of the under sheet to the bedtick. This keeps it from drawing toward the centre of the bed from the weight of the patient, forming wrinkles under him. I noticed one of the best nurses I have met doing this.

—J. S. Watt, M. D., of Belvue, Kan.
Medical World.

THE PHILOSOPHY OF FRYING.

The true philosophy of frying is to have the fat at a boiling heat before anything is put into it. If merely warm it penetrates and the food is “greasy.”

—M. K. W.

FOR THE INVALID'S TRAY.

Toast.—Cut thin slices of bread into strips, toast carefully and evenly without breaking and serve immediately on a hot plate, slightly buttered, if admissible. This may also be served with the juice from roast beef or mutton poured over.

Chicken Tea.—Cut in small pieces a chicken from which the skin and fat have been removed. Boil the pieces in one quart of water, with a little salt, for 20 minutes. The tea should be poured from the chicken before the meat is quite cold.

Sweet Corn Coffee.—Brown the corn nicely in the oven and pound it or grind it. Make as any other coffee and put in a little milk or cream. It is a good drink when the patient can keep nothing on the stomach.

—M. K. W.

QUITE PROBABLE.

A Nevada hunter spent three months hunting for a grizzly bear, and the man's relatives have spent three months looking for him. They think he must have found the bear.

—Texas Sifter.